Directed®

SMARTSTART™

5000-series
Security and Remote Start System

Owner's Guide

Congratulations

Congratulations on the purchase of your state-of-the-art security and remote start system. Reading this Owner's Guide prior to using your system will help maximize the use of your system and its many features. For more information please visit us online at:

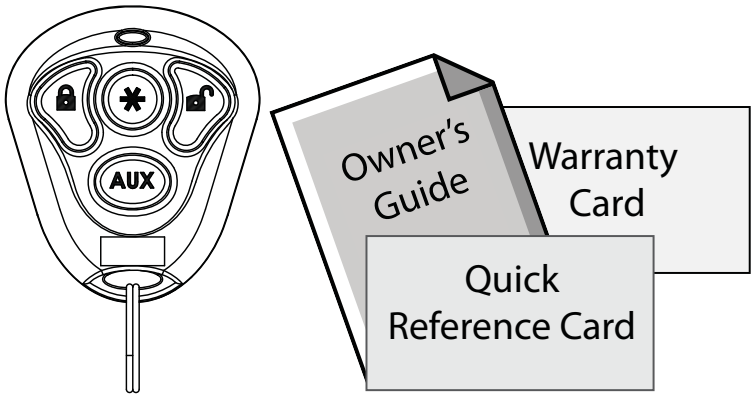
www.directed.com/SmartStart

For any additional questions please contact your authorized Directed dealer or contact Directed at 1-800-753-0600. Additional support is also available at:

http://support.directed.com

What's included

- One 4-button 1-way remote control
- Your warranty registration
- Quick reference card
- This owner's guide



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Important information

Government Regulations and Safety information

Read the *Government Regulations* and *Warning! Safety First* sections of this manual prior to operating this system.

Warning! Failure to heed this information can result in death, personal injury or property damage and may also result in the illegal use of the system beyond its intended purpose.

Your Warranty

Your system comes with a warranty. Please make sure you receive the warranty registration card and proof of purchase from your dealer indicating the product was installed by an authorized Directed dealer. Your product warranty must be validated within 10 days of purchase. You can validate online at: www.prodregister.com/directed or complete and return the warranty registration card.

Replacement Remote Controls

If additional remote controls are desired, please see your authorized dealer or visit us at www.directedstore.com to order. The supplied remote control is part number 474T.

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Getting Started

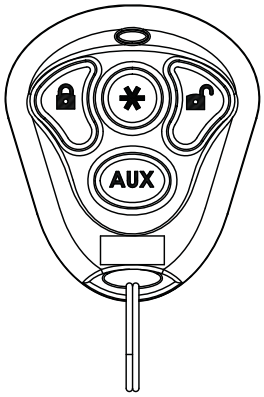
System Maintenance

The system requires no specific maintenance beyond battery replacement for the remote controls. Your 1-way remote control is powered by a coin cell battery (CR-2032) that can be purchased at most retailers. The operating range diminishes as the battery weakens.

Battery Replacement

Locate the small slot on the side of the remote control. Insert a small slotted screwdriver or equivalent tool into slot and pry the case apart. Replace battery while verifying the correct polarity and then snap case together.

1-way Remote Control



Feature	Description
Transmit LED	On (flashes) during remote control activity
Command buttons (4)	Used to perform arming/locking, disarming/unlocking, auxiliary channel and remote start commands

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Basic Commands

Arm/Lock

Press and release

The alarm arms, doors lock (if connected), and the siren/horn sounds and parking lights flash once. If Valet mode* is On, the doors lock. Exit Valet mode to arm/lock the alarm normally.

To Arm/lock and Panic

Press and **hold**

The alarm Arms (or Locks in Valet) and, after 2 seconds, sounds the siren/horn and flashes the parking lights.

Disarm/Unlock

Press and release

The alarm disarms, doors unlock (if connected), and the siren/horn sounds and parking lights flash twice. Turns panic off if on. If Valet mode* is On, the doors unlock.

AUX

Press and release **AUX**

Perform before the Arm/lock or Disarm/unlock command to use the remote control in **Silent Mode™**.

Note: The Warn away response to lighter impacts is bypassed if the system is armed using silent mode. this ensures that no chirps are emitted by the siren in an area you want chirp -free but the system is fully capable of triggering.

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For optional function (trunk release)

Press and **hold** AUX

Activates the Aux output, such as trunk release or an expansion function that you have added to your system. The auxiliary output controls: _____.

Remote Start

Press and release

Activates (or if On, deactivates) the remote starter. The engine and parking lights turn On.

* See *Remote and System Operations* for details.

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Advanced Commands

Additional Auxiliary functions.

Press 🔒 and **AUX** buttons simultaneously

Activates an optional auxiliary convenience or expansion function that you have added to your system.

The auxiliary output controls _____

Press and **AUX** buttons simultaneously

Activates an optional auxiliary convenience or expansion function that you have added to your system.

The auxiliary output controls _____

Press and ✳ buttons simultaneously

Activates an optional auxiliary convenience or expansion function that you have added to your system.

The auxiliary output controls _____

Timer mode

Press 🔒 and buttons simultaneously

Activates timer mode.

Short-run turbo mode

Press ✳ and **AUX** buttons simultaneously

Activates short-run timer mode.

Optional rear window defogger

Press 🔒 and ✳ and **AUX** buttons simultaneously

Activates the optional Rear window defogger. The parking lights flash two times and the rear defogger is no longer active when the vehicle

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is remote started. When the same procedure is repeated, the defogger activates and the parking lights flash three times. If the vehicle interior temperature is greater than 55°F when the remote start is activated, the rear defogger does not turn on.

Temperature Start Mode

Press and and **AUX** buttons simultaneously

Activates the Temperature Start mode. The parking lights flash fast four times to confirm activation. The engine does not start once activated, it starts when the vehicle interior temperature drops below 0°F.

Warning! Car should be parked in a well ventilated area when using this feature.

Deactivate Temperature Start mode by pressing the same buttons again or turning the vehicle ignition on. The parking lights flash slowly four times to confirm deactivation.

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Remote and System operations

Passive arming/locking

The system can be programmed to arm/lock itself automatically (called passive arming/locking). If the system is programmed for passive arming/locking, it will automatically arm/lock 30 seconds after the ignition is turned off and the system detects that you have left the vehicle by opening and closing a door. Whenever the system is in its 30-second passive arming/locking countdown, the status LED will flash twice as fast as it does when the system is armed/locked. At the 20-second point of the countdown, the siren/horn will sound to indicate that the system is about to arm/lock. At the 30-second point, the parking lights will flash to indicate that the system is armed/locked.

Note: If any protected entry point (such as a door or a switch-protected trunk or hood) is open, the system will not passively arm/lock (unless forced passive arming/locking is programmed on). See Programming Options section in the expanded version of this manual online at www.automatecarsecurity.com..

Warn away® response

A Warn Away Response consists of an alarm page along with the responses described below.

- Shock Sensor - Light impacts to the vehicle will flash the vehicle lights and sound the siren/horn for a few seconds.

Triggered response

A Triggered Response can be activated by any of the triggers listed below. The default Triggered Response duration is 30 seconds but can be programmed from 1-180 seconds by your installer.

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- Shock Sensor Trigger - Heavy impacts to the vehicle will instantly sound the siren/horn and flash the lights for the programmed duration and report Zone 2.
- Door Trigger - If a door is opened the siren/horn will sound and lights flash for three seconds, then the siren/horn will sound continuously and the lights will flash for the programmed duration and report Zone 3. The three seconds allow the user time to disarm/unlock the system with a minimum of noise should a door be opened inadvertently while the system is armed/locked.
- Hood Trigger - Opening the hood will sound the siren/horn, flash the lights for the programmed duration, and report Zone 1.
- Trunk Trigger - Opening the trunk (if connected) will instantly sound the siren/horn and flash the lights for the programmed duration and report Zone 4.
- Ignition Trigger - Turning on the ignition key will trip the same progressive response as the door trigger and report Zone 5.

Multi-level security arming

Multi-Level Security Arming allows you to select which of the system's inputs or sensors will be active and which will be bypassed when the system is armed.

Pressing 🔒 again within five seconds of arming the system activates the Multi-level security feature. Each time 🔒 is pressed, a different security level is selected.

To select the security levels:

Press 🔒 once: The siren chirps once. The system is armed with all zones active.

Press 🔒 a second time within five seconds. The siren chirps twice fol-

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lowed by a long chirp. Zone 2 is now bypassed.

Press a third time within five seconds. The siren chirps three times followed by a long chirp. Zone 4 is now bypassed.

Press a fourth time within five seconds. The siren chirps four times followed by a long chirp. Zones 2 and 4 are now bypassed.

Press a fifth time within five seconds. The siren chirps five times followed by a long chirp. All input zones, except the ignition are now bypassed.

Note: Multi-level security arming only applies to a single arming cycle. Once the system is disarmed and then re-armed, all the zones will be active again.

Arming while driving

Your security system can be armed while driving the vehicle. Press on the remote control for two seconds while the vehicle is running. The siren/horn will sound once to indicate that the security system is armed, and then once more to indicate that the ignition is on. The system will not respond to any input except the door triggers, and the starter kill relay (if installed) will not be activated. Once you have arrived at your destination, the system will disarm when the ignition is turned off. The siren/horn will sound twice and the LED will then stop flashing. The system can also be disarmed at any time by pressing

High security disarm

This security system offers High Security Disarm. High Security Disarm is a feature that makes it possible to silence and reset the system while it is triggering, without disarming the system.

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If the system is triggered and the siren has been sounding for longer than six seconds, pressing on the remote silences the siren while keeping the system in the armed state. The system does not disarm, but resets. Pressing again after silencing the system will disarm the system.

If the system is triggered and the siren has been sounding for less than six seconds, pressing disarms the system. The six second timer is provided for your convenience, in case the system is accidentally triggered.

System Override

If your remote control is lost or damaged, you can manually disarm your vehicle security system or disable an optional starter kill. To disarm or disable the system without a remote control, you must have the vehicle's ignition key.

To disarm/disable the system:

1. Turn the ignition to the ON position.
2. Press the control center button the preset number of times (one to five times) within 15 seconds. The factory default setting is 1 press. After five seconds, the system will disarm/disable. If the system does not disarm/disable, you may have waited too long. Start over by turning the ignition off and on.

Number of Presses_____

Important: The control center button can be programmed to respond to 1-5 presses for the disarm/disable function. You must check with the installer to verify the programming for your individual unit.

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Valet mode

You can prevent your system from automatically arming/locking and triggering by using Valet Mode. This is very useful when washing the vehicle or having it serviced. In Valet Mode, the system/starter kill will not arm/enable, even with the remote control, but all convenience functions (door locks, trunk release, etc.) will continue to work normally.

To enter or exit Valet Mode:

1. Turn the ignition on.
2. Turn the ignition off.
3. Press and release the control center button within 10 seconds.

To enter or exit Valet Mode using the remote control:

4. Open any vehicle door.
5. Press .
6. Press and then press again.

The status LED lights solidly if you are entering Valet Mode, and goes off when you exit Valet Mode.

Panic Mode

if you are threatened in or near your vehicle, you can attract attention by triggering the system with your remote control.

Press and **hold** for two seconds. The siren sounds and the parking lights flash for the programmed siren duration. To stop panic made at any time, **press** on the remote control again.

Remote start

This feature allows you to remotely start and run your vehicle for a programmable period of time. This makes it possible to warm up the engine, as well as adjust the interior temperature of the vehicle with

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the climate control system. If interior heating or cooling is desired, the climate controls must be preset, and the fan blower must be set to the desired level prior to remote starting the vehicle.

Warning! (1) Never remote start your vehicle when the keys are in the ignition, except when performing Valet® Take-Over, and (2) Never start the vehicle if it is not in PARK or NEUTRAL

To remote start the vehicle:

- Press ✲ on the remote control once.
  The parking lights flash to confirm that the vehicle will attempt to start. With gas vehicles the engine starts 4 seconds after the parking lights flash. With diesel vehicles the engine starts when the WAIT-TO-START indicator on the dashboard goes out or the programmed delay has ended.
  Once the vehicle has started, it runs for the pre-programmed period of time or until a shutdown input is triggered.

Warning! It is unsafe to operate a vehicle's motor in a garage or other closed off area. Breathing the exhaust from the vehicle is hazardous to your health. Never activate the remote start in an enclosed space.

When you are ready to drive the vehicle:

1. Insert the ignition key and turn it to the On position.
2. Press the brake pedal.

Note: If the brake pedal is pressed before the key is in the ON position, the engine will shut down.

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While the vehicle is running during remote start operation, the system monitors the vehicle and automatically shuts down the engine if the system receives any of the following:

- The brake pedal is pressed
- The hood is opened
- The shutdown toggle switch is put into the Off position.
- Runtime (12,24, or 60 minutes) expires
- Remote control button is pressed once.

Optional rear window defogger

Pressing the , and AUX simultaneously activates/deactivates the optional rear window defogger. The parking lights flash two times and the rear defogger is no longer active when the vehicle is remote started. When the same procedure is repeated, the defogger activates and the parking lights flash three times. If the vehicle interior temperature is greater than 55°F when the remote start is activated, the rear defogger does not turn on.

Timer Mode

When you activate timer mode the system automatically starts the vehicle every three hours for a maximum of 6 starts. The pre-programmed engine runtime is 12 minutes.

- Press and to activate timer mode. The parking lights flash four times, and after a 1 second delay, the engine starts.
- To shutdown the engine, press the button. The engine will shutdown while the system remains in timer mode and will continue to start every 3 hours until the system reaches the maximum amount of starts or is cancelled by turning on the ignition, activating the brake, or turning off the shutdown toggle switch.
- The parking lights flash 4 times indicating timer mode is exited.

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Important! Timer Mode should be used only in open areas. Never start and run the vehicle in an enclosed space such as a garage or carport.

Short Run/Turbo Mode

Short run turbo mode keeps the engine running after arriving at your destination for a programmable period of 1, 3, 5 or 10 minutes. This allows the system's timer to conveniently cool down the turbo after you have left the vehicle.

To activate:

1. Park the vehicle and set the parking brake.
2. Remove your foot from the brake pedal and leave the engine running.
3. Press and release the ✳ and **AUX** buttons at the same time. The lights will flash to indicate the remote start has entered short run turbo mode.
4. Turn off the key, the engine will keep running.
5. Exit and secure the vehicle. The engine will turn off after the programmed run time.

Temperature Start Mode

Pressing the , ✳ and **AUX** simultaneously activates the Temperature Start mode. The parking lights flash fast four times to confirm activation. The engine does not start once activated, it starts when the vehicle interior temperature drops below 0°F.

Deactivate Temperature Start mode by pressing the same buttons again or turning the vehicle ignition on. The parking lights flash slowly four times to confirm deactivation

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Valet Take-Over

The Valet Take-Over feature allows the vehicle to remain running after the key has been removed from the ignition. This feature is useful for occasions when you wish to exit and lock the vehicle for short periods of time, but would like to leave the motor running and the climate controls on.

To perform Valet Take-Over:

1. Before turning off the engine, press and release on the remote control (or press and release the optional momentary switch). Then wait five seconds.
2. Turn the ignition key to the OFF position. (The engine will stay running.) The engine will run until the pre-programmed time elapses or a shut-down input is received. (See the previous Remote Start section for a complete list of shut-down inputs.)

This feature will not work if the brake pedal is being pressed.

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Safety features

This system has several important safety features to ensure proper operation of the motor and prevent accidental damage to the engine or its components.

Starter-anti-grind circuitry

Whenever the vehicle is remote started, advanced anti-grind circuitry prevents the starter from engaging, even if the key is turned to the start position. This prevents damage to the starter motor if the key is turned to the start position during remote start operation.

Important: The Fail Safe starter kill option must be installed for this feature to work.

Disabling the remote start system

This feature allows your system's remote start unit to be temporarily disabled to prevent the vehicle from being remote started accidentally. This feature is useful if the vehicle is being serviced or stored in an enclosed area. To disable the remote start, move the shutdown toggle switch to the OFF position. The switch can be installed in a location of your choice. Check with your installer for recommended locations.
Location of Shutdown Switch_____

Shut down inputs

This security system uses several inputs to shut down the remote start operation of the motor or prevent remote start if certain inputs are active. The two most important are hood and brake inputs. The hood input will prevent the motor from starting, as well as shut it down, any time the hood is opened. The brake pedal will shut down the motor at any time during remote start operation, as well as preventing the remote start from activating while it is being pressed.

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Diagnostics

The microprocessor at the heart of your system is constantly monitoring all of the switches and sensors connected to it. It is designed to detect any faulty switches and sensors and prevents them from disabling the entire system. The microprocessor will also record and report any triggers that occurred during your absence. Refer to the Table of Zones sections of this guide for diagnostic information.

Arming diagnostics

If the security system is armed at the same time that an input is active (such as a door opening or sensor triggering), you will hear one siren/horn sound to indicate arming and a second siren/horn sound to indicate Bypass Notification.

A Bypass Notification sound means that the security system ignores the input that was active when the system was armed, until that input ceases. For more information, please refer to the expanded version of this manual online at www.automatecarsecurity.com

Disarming diagnostics

Extra sounds that are heard when disarming the system are the Tamper Alert. If four sounds are heard when disarming the system, then the security system was triggered in your absence. If five sounds are heard when disarming the system, a zone was triggered so many times that the Nuisance Protection® Circuitry has bypassed that zone. For more information, please refer to the expanded version of this manual online at www.automatecarsecurity.com

Nuisance Prevention® Circuitry

Your system has Directed's Nuisance Prevention Circuitry (NPC). It

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prevents annoying repetitive trigger sequences due to faulty door pin switches or environmental conditions such as thunder, jackhammers, airport noise, etc.

Example: If the alarm triggers three times within a 60-minute period and each time the same sensor or switch triggers the alarm, NPC will interpret those triggers as false alarms. After the third trigger, NPC ignores, or bypasses, that sensor or switch (along with any other sensors or switches sharing the same zone) for 60 minutes.

If the bypassed sensor tries to trigger the security system while it is being bypassed, the 60-minute bypass period will start over. This ensures that a sensor that is continually being triggered will remain bypassed. The vehicle doors are protected by NPC differently. If your security system is triggered by an open door for three full cycles, the system will bypass the doors until the trigger ceases.

Note: Arming and disarming the system does not reset this function. The only way to reset a bypassed zone is to not have it trigger for 60 minutes, or to turn on the ignition. If testing your system, remember that the NPC programming can cause zones to be bypassed and appear to stop working. If five chirps are heard when disarming, NPC has been engaged. If you wish to clear the NPC memory, turn the ignition on.

Table of zones

A zone is represented by the number of LED flashes used by the system to identify a particular type of input. Standard input assignments are listed in the following table, along with spaces to write in any optional sensors or switches that have been installed.

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Zone	Description	Dealer installed options
1	Trunk Pin	
2	Instant trigger: a heavier impact detected by the shock sensor	
3	Door switch trigger	
4	Instant trigger: for optional sensors	
5	Ignition trigger	
6	Hood Pin	

Your system stores the last two triggered zones in memory. If your system has been triggered but the LED has been reset by turning on the ignition, your dealer can still recall the last two zones that were triggered. Contact your dealer for details.

Interpreting zone diagnostics

Warn Away responses are not reported by arming or disarming diagnostics. If you receive a Bypass notification when arming or a Tamper Alert notification when disarming, look at the LED in the vehicle. Active or triggered zones will be indicated by a pattern of blinks by the LED.

For example: If zone 3 was active or triggered, the LED will blink three times with a two-second pause. Then it will blink three times again, and repeat until the ignition is turned on.

Your system stores the last two triggered zones in memory. If your system has been triggered but the LED has been reset by turning on the ignition, your dealer can still recall the last two zones that were triggered. Contact your dealer for details.

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Programming options

Programming options control your system's normal, operational set-up. Most options do not require additional parts, but some may require installation labor. See your authorized Directed dealer for more details.

The following is a list of the programmable options, with the factory settings in Bold.

- **Active arming** (transmitter only) or Passive arming (automatic arming 30 seconds after the last door has been closed).

- Arming/disarming siren chirps **On** or Off.

- The ignition controlled door lock feature On or **Off**: When this feature is programmed on, the doors will lock three seconds after the ignition is turned on, and unlock when the ignition is turned off. If your installer is programming the security system with the Directed Bitwriter, ignition lock and unlock are independent features that can be programmed separately.

  Important: The vehicle doors must be closed for the ignition lock feature to work.

- Passive door locking (with passive arming) or **Active door locking** (only when arming with the transmitter). Passive locking allows the vehicle's doors to lock when the security system passively arms (after the 30-second countdown). This feature only works if passive arming has been programmed.

- Panic mode **Enabled**/Disabled when the ignition is turned on. (Some states have laws against sirens sounding in moving cars.)

- Forced passive arming **On** or Off. If your security system is programmed for passive arming and the forced passive arming feature has been programmed on, the system will passively arm after one hour, even if a protected entry has been left open. Forced passive arming ensures that the system will be armed if a door has accidentally been left ajar when leaving the vehicle.

  When the system passively arms after one hour, the entry point that has been left open, and anything connected to the same zone, is bypassed and cannot trigger the system. However, the remaining inputs to the system are fully operational.

- Full trigger response **30** or 60 seconds: This determines how long the full triggered sequence lasts. Some states have laws regulating how long a security system can sound before it is considered a nuisance.
  If your installer is programming the security system with the Directed Bitwriter, the full triggered response can be programmed for any duration ranging from 1 to 180 seconds.

- Siren tones and chirp volume. The output of the Revenger™ Soft Chirp™ siren consists of six different tones in sequence. Any of these tones can be eliminated by a dealer, resulting in a unique, easily identifiable siren sound. The chirps can be either full volume or 6 decibels quieter than the full alarm blast.

- **12**, 24, or 60 minute run time. your system can be programmed to allow the vehicle to run for 12, 24, or 60 minutes when remote started. Can be set up to minute increments by your installer.

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Note: If your installer is programming the system with the Bitwriter,® the remote start run time may be programmed for any duration ranging from 1 to 60 minutes.

- 3, 6, 9, or **12** minute timer mode run time. Your system can be programmed to allow the vehicle to run for 3, 6, 9, or 12 minutes when remote started in timer mode. Can be set from 1 to 16 minutes by your installer.

- While the remote start is running the engine, the parking lights Flash on and off, or **Come on steadily**.

- Comfort closure is a programming option which closes the vehicle's windows after remote locking.

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Government Regulations

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesirable operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

This device complies with the Industry Canada Radio Standards Specification RSS 210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.

Warning:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

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Warning! Safety First

The following safety warnings must be observed at all times:
Due to the complexity of this system, installation of this product must only be performed by an authorized Directed dealer.

When properly installed, this system can start the vehicle via a command signal from the remote control/transmitter. Therefore, never operate the system in an enclosed area or partially enclosed area without ventilation (such as a garage). When parking in an enclosed or partially enclosed area or when having the vehicle serviced, the remote start system must be disabled using the installed toggle switch. It is the user's sole responsibility to properly handle and keep out of reach from children all remote control/transmitters to assure that the system does not unintentionally remote start the vehicle. THE USER MUST INSTALL A CARBON MONOXIDE DETECTOR IN OR ABOUT THE LIVING AREA ADJACENT TO THE VEHICLE. ALL DOORS LEADING FROM ADJACENT LIVING AREAS TO THE ENCLOSED OR PARTIALLY ENCLOSED VEHICLE STORAGE AREA MUST AT ALL TIMES REMAIN CLOSED. These precautions are the sole responsibility of the user.

Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death. (1) Never remotely start the vehicle with the vehicle in gear, and (2) Never remotely start the vehicle with the keys in the ignition. The user must also have the neutral safety feature of the vehicle periodically checked, wherein the vehicle must not remotely start while the car is in gear. This testing should be performed by an authorized Directed dealer in accordance with the Safety Check outlined in the product installation guide. If the vehicle starts in gear, cease remote start operation immediately and consult with the authorized Directed dealer to fix the problem.

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After the remote start module has been installed, contact your authorized dealer to have him or her test the remote start module by performing the Safety Check outlined in the product installation guide. If the vehicle starts when performing the Neutral Safety Shutdown Circuit test, the remote start unit has not been properly installed. The remote start module must be removed or the installer must properly reinstall the remote start system so that the vehicle does not start in gear. All installations must be performed by an authorized Directed dealer.

OPERATION OF THE REMOTE START MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE START SYSTEM UNDER THESE CONDITIONS MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY. YOU MUST IMMEDIATELY CEASE THE USE OF THE UNIT AND SEEK THE ASSISTANCE OF AN AUTHORIZED DIRECTED DEALER TO REPAIR OR DISCONNECT THE INSTALLED REMOTE START MODULE. DIRECTED WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

Caution

This product is designed for fuel injected, automatic transmission vehicles only. Use of this product in a standard transmission vehicle is dangerous and contrary the product's intended use.

Patent Information

This product is covered by one or more of the following U.S. patents:

303,223	345,711	4,383,242	5,103,221	5,534,845	5,907,195
333,633	347,190	4,438,426	5,117,217	5,572,185	5,914,667
333,634	348,622	4,553,127	5,132,660	5,646,591	5,945,936
333,635	352,685	4,584,569	5,193,141	5,656,997	5,952,933
333,636	383,689	4,794,368	5,245,694	5,712,638	5,990,786
333,795	383,690	4,887,064	5,285,186	5,783,989	6,093,979
340,000	390,830	4,897,630	5,315,285	5,798,711	
344,905	392,944	4,922,224	5,357,560	5,872,519	
345,317	4,327,444	4,987,402	5,532,670	5,900,806	

International Patents:

Australia: 694,925
Canada: 1,315,859 and 2,067,099
Taiwan: 91817

Other patents pending

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Limited lifetime consumer warranty

Directed Electronics. ("Directed") promises to the original purchaser to repair or replace (at Directed's election) with a comparable reconditioned model any Directed unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the lifetime of the vehicle provided the following conditions are met: the unit was purchased from an authorized Directed dealer, the unit was professionally installed and serviced by an authorized Directed dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized Directed dealer; and the unit is returned to Directed, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. ALL PRODUCTS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF PURCHASE WILL BE DENIED. This warranty is non-transferable and is automatically void if: the original purchaser has not completed the warranty card and mailed it within ten (10) days from the date of purchase to the address listed on the card; the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. Directed, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage.

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Make sure you have all of the following information from your authorized Directed dealer:

A clear copy of the sales receipt, showing the following:

- Date of purchase
- Your full name and address
- Authorized dealer's company name and address
- Type of alarm installed
- Year, make, model and color of the automobile
- Automobile license number
- Vehicle identification number
- All security options installed on automobile
- Installation receipts

920-0003 06-06

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The company behind this system is Directed Electronics

Since its inception, Directed Electronics has had one purpose, to provide consumers with the finest vehicle security and car stereo products and accessories available. The recipient of nearly 100 patents and Innovations Awards in the field of advanced electronic technology, DIRECTED is ISO 9001 registered.

Quality Directed Electronics products are sold and serviced throughout North America and around the world.

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Directed Electronics is an ISO 9001 registered company.

Directed Electronics is committed to delivering world class quality products and services that excite and delight our customers.

driven to excel

Directed® ELECTRONICS

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Vista, CA 92081
www.directed.com
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GADSS5003 2010-08

Quick Reference Install Guide
5000-series Security and Remote Start System

Wiring Connections

Main Harness (H1), 12-pin connector

H1/1	RED/WHITE	(-) 200mA AUX TRUNK RELEASE OUTPUT
H1/2	RED	(+) CONSTANT POWER INPUT
H1/3	BROWN	(+) SIREN OUTPUT
H1/4		NOT USED
H1/5	BLACK	(-) CHASSIS GROUND INPUT
H1/6	VIOLET*	(+) DOOR TRIGGER INPUT, ZONE 3
H1/7	BLUE	(-) INSTANT TRIGGER INPUT, ZONE 1
H1/8	GREEN*	(-) DOOR TRIGGER INPUT, ZONE 3
H1/9	BLACK/WHITE	(-) 200mA DOMELIGHT SUPERVISION OUTPUT
H1/10	WHITE/BLUE	(-) REMOTE START ACTIVATION INPUT
H1/11	WHITE	(+)/(-) SELECTABLE LIGHT FLASH OUTPUT
H1/12	ORANGE	(-) 500mA GROUND WHEN ARMED OUTPUT

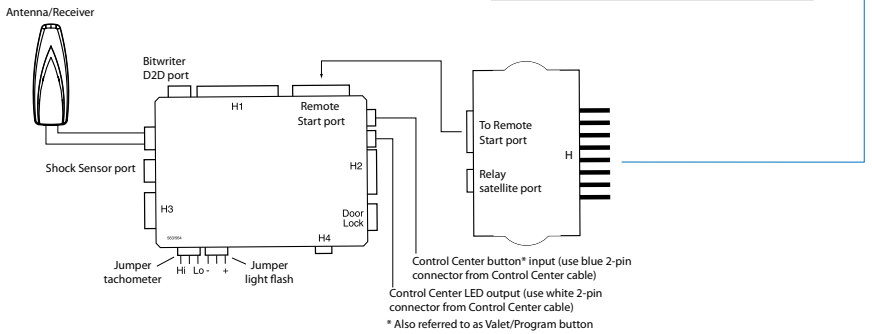
* The door trigger wire will still need to be connected if the system is programmed with security features OFF to allow the system to enter the programming modes.

Heavy gauge relay satellite

H/1	PURPLE	STARTER OUTPUT TO STARTER (STARTER SIDE)
H/2	GREEN	STARTER INPUT FROM IGNITION SWITCH (KEY SIDE)
H/3	RED	(+) 30A HIGH CURRENT 12V INPUT
H/4	ORANGE	OUTPUT TO ACCESSORY CIRCUIT
H/5	RED	(+) (30A) HIGH CURRENT 12V INPUT
H/6	PINK	OUTPUT TO PRIMARY IGNITION CIRCUIT
H/7	RED/WHITE	(+) (30A) HIGH CURRENT 12V INPUT
H/8	PINK/WHITE	OUTPUT TO SECOND IGNITION/ACCESSORY CIRCUIT

Relay satellite 4-pin connector

1	BLUE	(-) 200mA STATUS OUTPUT
2	ORANGE	(-) 200mA ACCESSORY RELAY TURN ON
3	PURPLE	(-) 200mA STARTER RELAY TURN ON
4	PINK	(-) 200mA IGNITION RELAY TURN ON



H4 AUX 4/Horn, 2-pin connector

H4/1	ORANGE/BLACK	(-) 200mA AUX 4 OUTPUT
H4/2	BROWN	(-) 200 mA HORN OUTPUT

Door Lock, 3-pin connector

1	LIGHT BLUE	(-) UNLOCK (+) LOCK OUTPUT
2		NOT USED
3	GREEN	(-) LOCK (+) UNLOCK OUTPUT

H2 Harness, 6-pin connector

H2/1	LIGHT BLUE	(-) 200mA SECOND UNLOCK OUTPUT
H2/2	WHITE/BLACK	(-) 200mA AUX 3 OUTPUT
H2/3	VIOLET/BLACK	(-) 200mA AUX 2 OUTPUT
H2/4	GREEN/WHITE	(-) 200mA FACTORY ALARM REARM OUTPUT
H2/5	GRAY/BLACK	(-) WAIT-TO-START INPUT
H2/6	LIGHT GREEN/BLACK	(-) 200mA FACTORY ALARM DISARM OUTPUT

H3 Harness Remote Start, 5-pin connector

H3/1	BLACK/WHITE	(-) NEUTRAL SAFETY SWITCH INPUT
H3/2	VIOLET/WHITE	TACHOMETER INPUT WIRE
H3/3	BROWN	(+) BRAKE SHUTDOWN INPUT WIRE
H3/4	GRAY	(-) HOOD PIN SWITCH INPUT, ZONE 6
H3/5	BLUE/WHITE	(-) 200 mA 2ND STATUS/REAR DEFOGGER - Latched Pulsed

Remote Start ribbon harness*

1	PINK/WHITE	(-) 200mA PROGRAMMABLE IGN2/ACC2 RELAY TURN ON
2	YELLOW	(+) IGNITION INPUT TO ALARM
3	PINK	(-) 200mA IGNITION RELAY TURN ON
4	ORANGE	(-) 200mA ACCESSORY RELAY TURN ON
5	PURPLE	(-) 200mA STARTER RELAY TURN ON
6	ORANGE/BLACK	(-) 500mA ANTI GRIND/GROUND WHEN ARMED OUTPUT
7	BLUE	(-) 200 mA STATUS OUTPUT

*The ribbon harness connects to the heavy gauge relay satellite.

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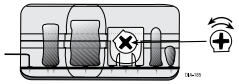
Installation Points

Adjusting the Shock Sensor

Important! Make sure the vehicle is disarmed. The shock sensor sensitivity can be adjusted by using a trimmer tool to turn the potentiometer.



Adjusting the sensor:
1. **Disarm** the system, **turn** the ignition Off.
2. With the sensor mounted in its permanent location, locate the trim pot on the shock sensor module and using a trimmer tool:
   - Turn the potentiometer clockwise for increased sensitivity or
   - Turn it counterclockwise for decreased sensitivity

   Note: You can test the new setting by cautiously impacting the vehicle with increasing intensity while noting the LED status on the shock sensor. The LED turns on for a short duration for small impacts before turning off (indicating a warn-away trigger). The impact level required to fully trigger the alarm is indicated when the LED remains on for a longer duration before turning off.

Tach Learning

To learn the tach signal:
1. Start the vehicle with the key.
2. Within 5 seconds, press and hold the control center button.
3. After 3 seconds the LED will light constant when the tach signal is learned.
4. Release the control center button.

Virtual Tach

Note: Virtual tach is not recommended for diesel trucks

To program Virtual Tach:
1. After the install is complete, remote start the car.
2. If the car does not start on the first attempt, let the remote start attempt again.
3. Once the car starts, let it run until the parking lights come on.
4. When the parking lights come on, shut off the remote start with the remote - that's it! Virtual Tach is programmed.

Virtual Tach handles disengaging the starter motor during remote starting – it does not address over-rev. If the customer wants to have the over-rev protection capability, the tach wire must be connected. This may involve more installation shop charges than initially quoted.

> **Important:** If the Virtual Tach mode over cranks or doesn't crank the vehicle long enough to start and run the car, use the Bitwriter to add or subtract the starter output time. You can adjust the output time in increments of 50msec of the learned time using the Bitwriter.

Reset and Deletion

If a feature/virtual tach needs to be reset or the remote controls need to be deleted, use the following procedure.

1. Open a door. (The GREEN wire, H1/8, or the VIOLET, H1/6 must be connected.)
2. Turn the ignition to the ON position (The heavy gauge pink wire must be connected).
3. Within 10 seconds, press and release the control center button: 2 times if you want to delete remotes, 3 times to reset features or 4 times to reset virtual tach. These features are described next.

   Delete remotes: This feature erases all remotes from the memory of the security system. This is useful in cases when a customer's remote is lost or stolen.
   Note: This does not reset the programmed features of the security system or reset the Virtual Tach setting.

   Reset Features: This resets all features of the security system to the factory default settings.
   Note: This feature does not delete the remotes from the security system or reset the Virtual Tach setting or security features enabled/disabled settings

   Virtual Tach Reset: Deletes all previously learned values for Virtual Tach, and on the next remote start sequence the unit begins virtual tach initialization.

   Note: The "Zap" feature on the Bitwriter does not reset the Virtual tach setting.

4. Once you have selected the function step, press the control center button once more and hold it. The LED flashes and the siren chirps to confirm the selected functional step. Do not release the control center button
5. While holding the control center button, press the 🔒 button on the remote control. The unit chirps to confirm that the feature has been successfully reset.

Once the feature is reset, the control center button can be released.

Remote Start Shutdown Diagnostics

To perform shutdown diagnostics:
1. With the ignition Off, **press** and **hold** the control center button.
2. **Turn** the ignition On and then back Off while **holding** the control center button.
3. **Release** the control center button.
4. **Press** and **release** the control center button. The LED flashes to report the last shutdown for one minute or until the ignition is turned on, as shown in the following table:

LED Flashes	Shutdown Mode
1 flash	Timed out
2 flashes	Over-rev shutdown
3 flashes	Low or no RPM, low battery (voltage and virtual tach modes)
4 flashes	Transmitter shutdown (or optional push button)
5 flashes	(-) Hood Shutdown (H3/4 GRAY)
6 flashes	(+) Shutdown (H3/3 BROWN)
7 flashes	(-) Neutral safety shutdown (H3/1 BLACK/WHITE)
8 flashes	Wait-to-start timed out

Bitwriters with a date code of 6a or older require an IC upgrade (p/n 998M). Some bitwriters with a date code of 6B do not require the IC upgrade, refer to tech tip # 1112 for more information.

D2D DATA TO DATA™

The Bitwriter® (p/n 998U) requires chip version **2.7** or newer to program this unit.

See full Installation Guide for more detailed information on this system. Such information and more can be found online at:
www.directechs.com

Directed® ELECTRONICS

Programming System Features

Note: When doing any programming with security features off, the horn function (feature menu 1 item 13) must be programmed as Siren function to get an audible confirmation from the unit.

The System Features Learn Routine dictates how the unit operates. It is possible to access and change most of the feature settings using the control center button.

1. **Open** a door.
2. **Turn** the ignition on, then off.
3. **Select** a Menu. **Press** and **hold** the control center button. The number of siren chirps indicates the menu number. 1 chirp indicates menu 1, 2 chirps - menu 2 and 3 chirps for menu 3.
4. When the desired menu chirps are heard, **release** the control center button.
5. **Select** a Feature. **Press** and **release** the control center button the number of times corresponding to the feature you wish to change. Then **press** and **hold** one more time to select the features.
6. **Program** the Feature. While holding the Control center button, you can program the feature using the remote control.

For features with only two options; 🔒 = option 1 while 🔓 = option 2.
For features with more than two options; 🔓 selects the options in ascending order.

Once a feature is programmed:
- Other features can be programmed within the same menu
- Another menu can be selected
- The learn routine can be exited if programming is complete

To access another feature in the same menu:
1. **Press** and **release** the control center button the number of times necessary to advance from the feature you just programmed to the next one you want to program.
2. Then **press** the control center button once more and **hold** it.

To select another menu:
1. **Press** and **hold** the control center button.
2. After 3 seconds, the unit advances to the next menu and the siren chirps, indicating which menu has been accessed.

The learn routine exits if any of the following occurs:
- The open door is closed
- The ignition is turned On
- There is no activity for 30 seconds
- The control center button is pressed too many times

Security Features Disable/Enable

The system has the ability to function as a security/remote start system or keyless/remote start system by enabling or disabling security. The default setting is Enabled.

To program the feature.
1. Open a door.
2. Turn the ignition on, then off.
3. Press and hold the control center button until the LED flashes 3 times and the siren (if connected) chirps 3 times.
4. Release the control center button.
   Note: If the control center button is released and then pressed again, the system will enter the features programming menus.
5. Within 15 seconds, simultaneously press the 🔒 and 🔓 buttons of a programmed remote control.
6. The siren (if connected) will chirp and the parking lights will flash as listed below
   1 flash/chirp: Security features disabled
   2 flashes/chirps: Security features enabled

Security Features Disabled will disable all security operations of the system, including but not limited to those listed below:
- Multi Level Arming
- Sensor Warn-away
- Full Trigger Operation
- Armed While Driving
- Automatic Engine Disable

Note: Disabled features with programmable options can still be programmed manually or with the Bitwriter but will not operate until the Security Features have been enabled.

The Security Features Disable/enable routine exits if the following occurs:
- The open door is closed
- The ignition is turned on
- There is no activity for 15 seconds
- The control center button is pressed too many times

Bitwriter - Only Options

If programming with the Bitwriter®, the learn routine can be locked or unlocked. If the learn routine has previously been locked, it must be unlocked with Bitwriter® - this cannot be done manually with the control center button.

The Bitwriter® gives you access to a wider range of system options. These features and the adjustments that may be programmed are described in the table below.

Menu Item	Feature	Default	Options
1	Siren Duration	**30 sec.**	1-180 sec.
2	Aux 2 Timed Output	**30 sec.**	1-90 sec.
3	Aux 3 Timed Output	**30 sec.**	1-90 sec.
4	Aux 4 Timed Output	**30 sec.**	1-90 sec.
5	Engine Runtime	**12 min.**	1-60 min.
6	Diesel Start Delay	**15 sec.**	1-90 sec.
7	Timer Mode Runtime	**12 min.**	1-16 min.
8	Virtual Tach Fine Tune	**Not initialized**	0-1000 in 50 millisecond increments
9	Transmitter Programming	**Unlocked**	Locked
10	Feature Programming	**Unlocked**	Locked

Note: The "Zap" feature on the Bitwriter does not reset the Virtual tach or security features enabled/disabled settings

Feature Menus

Default settings are in **bold** type.

Menu 1 - Basic

Menu Item	One-chirp setting	Two-chirp setting
1	**Active Arming**	Passive arming
2	**Arm/disarm chirps on**	Arm/disarm chirps Off
3	Ignition lock On	**Ignition lock Off**
4	Ignition unlock On	**Ignition unlock Off**
5	**Active locking only**	Passive locking
6	**Panic with ignition On**	No panic with ignition On
7	**0.8 second door lock pulses (1)**	3.5 (2), 0.4 (3) seconds
8	**Forced passive arming on**	Forced passive arming off
9	Automatic engine disable on	**Automatic engine disable off**
10	**Armed When Driving (AWD) On**	AWD Off
11	**Code Hopping On**	Code Hopping off
12	**Horn Output Pulsed**	Constant
13	**Horn function Full Alarm Only (1)**	Siren function - chirp length 20ms (2), 30ms (3), 40ms (4), 50ms (5)
14	Comfort Closure ON (1)	**Comfort Closure OFF** (2) Comfort Closure 2 (3)

Menu 2 - Advanced

Menu Item	One-chirp setting	Two-chirp setting
1	**30 second siren duration**	60 second siren duration
2	**Nuisance Prevention Circuitry On**	Nuisance Prevention Circuitry OFF
3	**Progressive door trigger**	Instant door trigger
4	**Disarm from Valet, 1 pulse**	Disarm from Valet, 2-5 pulses
5	**Door trigger error chirp ON**	Door trigger error chirp OFF
6	**Ignition controlled domelight On**	Ignition controlled domelight OFF
7	**Unlock output 1 pulse**	Unlock output 2 pulses
8	**Lock output 1 pulse**	Lock output 2 pulses
9	**Factory disarm with trunk release ON**	Factory disarm with trunk release OFF
10	**FAD function with Unlock (1)**	Before Unlock (2), Remote Start only (3)
11	**FAD 1 pulse**	2 pulses
12	**AUX 2 validity (1)**	Latched (2), Latch reset with ignition (3), 30-secs timed (4), 60-secs (5), 90-secs (6)
13	**AUX 2 Linking None (1)**	Arm (2), Disarm (3), Remote Start (4)
14	**AUX 3 validity (1)**	Latched (2), Latch reset with ignition (3), 30-sec. timed (4)60sec(5)90sec(6)
15	**AUX 3 linking None (1)**	Arm (2), Disarm (3), Remote Start (4)
16	**AUX 4 validity (1)**	Latched (2), Latch reset with ignition (3), 30-sec. timed (4) 60sec (5) 90 (6)
17	**AUX 4 linking None (1)**	Arm (2).Disarm (3), Remote Start (4)

Menu 3 - Remote start

Menu Item	One-chirp setting	Two-chirp setting
1	**Engine checking: Virtual Tach**	Voltage(2), OFF(3), Tachometer(4)
2	**Remote start runtime: 12 min**	24 min, 60 min
3	Parking light output: Flashing	**Constant**
4	**Cranking time: 0.6 sec**	0.8, 1.0, 1.2, 1.4, 1.6, 1.8, 2.0, 4.0 second
5	**Activation pulse 1**	2
6	**2nd Ignition/Acc output: Ignition**	Accessory
7	**Acc state during wait-to-start Off**	On
8	**2nd status output: Normal**	Rear defogger: latch 10 min. rear defogger pulse
9	**Anti grind: On**	Off
10	**Diesel timer: Wait-to-Start input**	Timed 15 , 30 ,45 seconds
11	**Timer mode run time: 12 min**	3, 6, 9, min
12	**Timer mode: Timed starts**	Temp starts
13	**Short run (turbo): 1 min**	3,5, 10 min

Remote Programming

1. Open a door
2. Turn key to the ON position
3. Within 5 seconds, press and release the control center button one time.
4. Within 5 seconds, press and hold the control center button. The LED will flash one time and the siren chirps to confirm entry into remote programing.
5. Press the 🔒 button on the remote control.
6. The siren will chirp to confirm the remote has been programmed.
7. Release the control center button.
8. The siren will emit one long chirp confirming that remote programming has been exited.

The programming routine exits if any of the following occurs:
The open door is closed
The ignition is turned off
There is no activity for 30 seconds
The control center button is pressed too many times

Basic Remote Functions

Button	Function
🔒	ARM
🔓	DISARM
✱	REMOTE START
AUX	TRUNK RELEASE

Note: See Owner's guide for more details

Long Term Event History

The system stores the last two full triggers in memory. These are not erasable. Each time the unit sees a full trigger, the older of the two triggers in memory is replaced by the new trigger. To access long term event history:

1. With the ignition Off, **press** and **hold** the control center button.
2. **Turn** the ignition On.
3. **Release** the control center button.
4. Within 5 seconds, **press** and **release** the control center button. The LED flashes in groups indicating the last two zones that triggered the unit for 1 minute or until the ignition is turned off. Refer to table of zones.

Note: The Warn Away triggers are not stored to memory and is not reported.

Table of Zones

A zone is represented by the number of LED flashes used by the system to identify a particular type of input.

Zone	Trigger Type	Input Description
1	Instant Trigger	BLUE (H1/7)
2	Multiplexed Shock Sensor Input	Mux BLUE sensor port wire.
3	Door Trigger	GREEN (H1/8) and VIOLET (H1/6).
4	Multiplexed Shock Sensor Input	Mux GREEN wire
5	Ignition	Yellow ribbon harness wire
6	Hood Trigger	GRAY on the 6-pin shutdown harness

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Directed®

SMART**START**™

Quick Reference Install Guide

VSM200/250, DSM200/250

Installation Procedure

This product is compatible with most Directed Electronics Security, Remote Start and hybrid systems that are ESP2 compatible (3 or 4-pin). Non-compatible systems include 3001L and older AM1/AM5 models.

Please read the following before proceeding

1. Customer Information required:
   - Record the customer information requested in step 4a of this procedure. The module ID # is provided on a sticker which can be affixed to the space provided in step 4a.

   This information is required for final verification/activation of the VSM200/250 or DSM200/250.

2. Installation Points:
   - Install and test the security/remote start system first using the associated guides and wiring diagram. If using an existing system, verify it is fully functional before installing the Directed SmartStart module.
   - For 3000-series or standalone SmartStart systems with no remote control, test the installed system via the SmartStart activation portal.
   - Mount the SmartStart module as high as possible in the vehicle (the engraved side faces up for GPS devices). Mount with minimal obstructions that can affect communications and within reach of the main Directed system using the provided cables (do not extend).

The module's signal strength (RSSI) can be viewed in the activation portal after a successful transmission test.

-50 to -90 dB = good signal strength
-91 to -100 dB = borderline/inconsistent signal strength
> -100 dB = weak, insufficient signal strength

- DO NOT connect the SmartStart module until the final programming of the Remote Start main unit and verification of security/remote start system operations are completed.

⚠ CAUTIONS

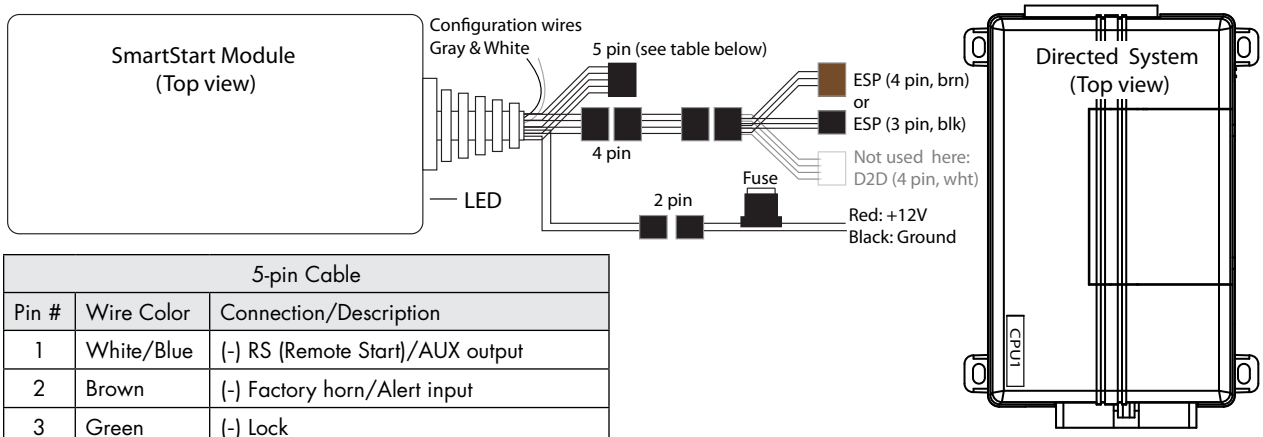
The white plug is **ONLY** for RSR (Remote Start Ready) and RXT applications using certain Xpresskit interfaces (go to www.xpresskit.com for details on supported devices & vehicles).

For systems with combined 4-pin ESP/D2D ports, you **CANNOT** use an interface module in D2D mode when using a SmartStart module. You must use W2W on the bypass module.

DO NOT connect the black 3-pin ESP connector to white Door Lock port on Directed systems.

There should **NEVER** be more than one data plug connected from the 3-way harness.

Wiring Schematic



5-pin Cable		
Pin #	Wire Color	Connection/Description
1	White/Blue	(-) RS (Remote Start)/AUX output
2	Brown	(-) Factory horn/Alert input
3	Green	(-) Lock
4	Blue	(-) Unlock
5	Red/White	(-) Trunk/AUX output

Note: The analog output wires are only active if the device has been configured for Analog Wire mode in the installation portal.

NOTE: The appearance and connector/port arrangement on the Directed/Avital/Xpresskit system may differ to the examples shown .

3. Install the VSM200/250 or DSM200/250 using the information in the wiring diagram and steps (Note CAUTIONS during installation).
   a. Configuration Wires: Connect the loose gray or white configuration wire(s) to match the desired application (see table below).

MODE	GRAY WIRE	WHITE WIRE
ESP2	Open	Open
D2D, RSR/RXT	GND	Open
Autostart/AstroStart	Open	GND

   b. Connect the serial data cable and adapter to the correct port of the main module. For D2D RSR/RXT applications, connect the serial data cable and adapter to Xpresskit module.
   c. Complete the main power connections.
   d. When power is connected, the module begins an initialization procedure that may take several minutes. During this procedure, progress is reported via the flashing Amber/Green LEDs next to the module cable. When both LEDs turn on solid, the initialization procedure is completed (See *Status LEDs* for a description of the various LED states).

4. Verify and Activate the SmartStart module:
   The following steps need to be performed for the Verification/Activation of the Directed SmartStart module.

   a. Collect Customer Information:

Customer's Full Name:

Customer's E-mail Address:

Customer's mobile phone # and phone carrier

Record/place Module ID # here:

New Account: ☐ Existing Account: ☐

If this is an existing account, are you:

adding a new system: ☐

or replacing an existing one: ☐

   b. Log on to: www.directechs.com, and click on the SmartStart link.
   c. Follow the on-screen directions to activate and test a SmartStart device. If this is the customer's first SmartStart system, you will be prompted to enter their information as collected in step 4a.
   d. Set configuration for commands to match the installed application.
   e. Test the SmartStart system from the website using the supplied function links.
   f. The customer is sent log-in information via e-mail. After logging into the site at www.mysmartstart.com, they must select and pay for the service plan in order to start using the system.

Status LEDs

Amber LED states:

- Off: No cellular communication. Check connections such as module harness.
- Flashing slowly: The module is seeking cellular system communication.
  If no cell coverage is available the Amber LED continues to flash slowly, move the vehicle to a location with better reception.
- Flashing quickly: The module is negotiating with a cellular system.
- On solid: Communication successfully established.

Green LED states:

- Off: Communication not established with the remote start main unit or no serial device is connected.
  Check connection at the Bitwriter port, once connected properly the LED turns on after resetting the power to the SmartStart module.
- On solid: Communication successfully established with the remote start main unit.

Please return this guide and point the customer to steps 4a and 4f after successfully completing the installation as it contains details required for account setup.

Notes: SmartStart response time can vary depending on cellular coverage and network congestion.
Operating temperature range: -30°C to + 70°C.

Additional information can be found at: www.directechs.com

Directed ELECTRONICS

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Directed

SMARTSTART™

Quick Reference User's Guide

DSM200, 3000/5000-series

Congratulations on the purchase of your state-of-the-art Directed SmartStart system. Reading this user's guide prior to using your system will get you off to a quick and smooth start.

Start Here

Before you can start using your system, the following steps must be performed:

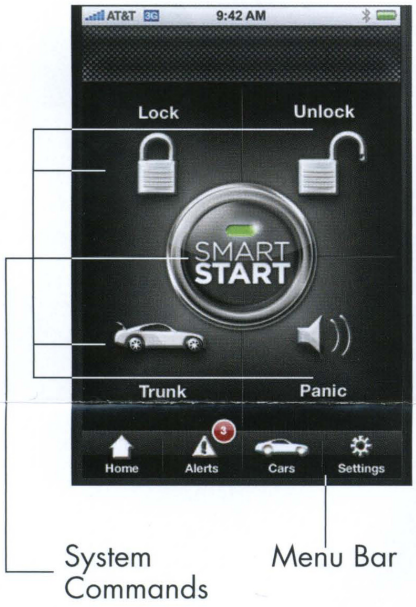
1. Download the free SmartStart application to your smartphone from the iTunes App Store, BlackBerry App World or Android Market site depending on which brand you own. Links to download BlackBerry and Android apps are also available at www.directed.com/SmartStart

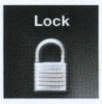
2. Have the SmartStart system installed by your authorized Directed dealer. Once installed and activated by the installer, you will receive an e-mail prompting you to activate your account. Your installer can also provide you with information about your system.

3. After you activate your account, enter your username and password on the Settings tab of the handset app to activate your SmartStart app.

4. Once you have completed the log-in process on your smartphone, you can begin using your app to control your vehicle(s). From the Car screen, select the vehicle you wish to send commands to.

Commands at a Glance



System Commands		Description
	Lock	Select this icon to lock the vehicle. When a confirmation message is received, select it to clear.
	Unlock	Select this icon to unlock the vehicle. When a confirmation message is received, select it to clear.
	Smart Start	Select this icon to remote start* your vehicle. When a confirmation message is received, select it to clear. The vehicle remote starts and stays running for the programmed run time*. Select this icon again to turn off the engine during the run time.
	Trunk	Select this icon to open trunk. A dialog box will open, asking you to confirm you want to open the trunk. Select "Yes" to confirm, or "No" to cancel the request. If you selected "Yes", select again to clear the confirmation message when it pops up.
	Panic	Select this icon to activate panic mode for 30 seconds. Select again during this time to turn off. This feature is used to attract attention if in a threatened position.

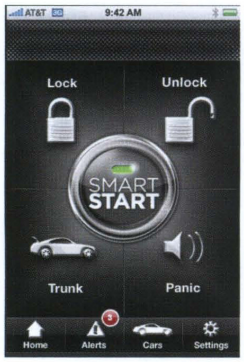
* See your Remote Start system user's guide or installer for important information about starting a manual transmission vehicle and how long the engine will run when remote started.

Your vehicle responds exactly the same, with audible and visual confirmations, for both Smartstart and remote control commands.

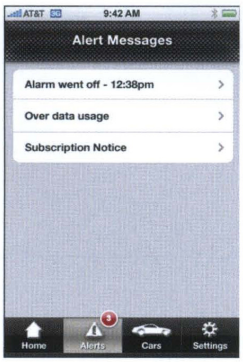
Menu Bar and Screens

Menu Bar		Description
	Home	This screen is the default screen for direct access to all your remote commands. Select any command on the Home screen to perform it.
	Alerts	This screen provides notifications from the system. These notifications are indicated by a red circle above the Alerts icon which also indicates the number of uncleared notifications received. These notifications can be in the form of alarms, communication issues or updates to your service plan. The available Alerts may vary depending on the type of system installed in your vehicle. Note: Alerts may not be functional, depending on your app version or installed system.
	Cars	This screen allows you to control multiple vehicles if you have a security/remote start system installed in more than one vehicle.
	Settings	From this screen you can control your SmartStart login.

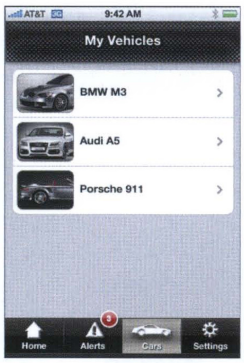
Screens



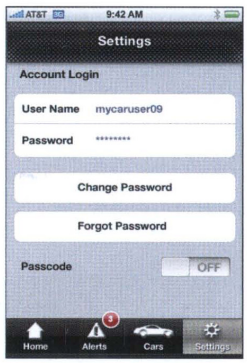
Home Screen



Alerts Screen



Cars Screen



Settings Screen

Please visit www.directed.com/SmartStart for the latest updates and information about your SmartStart system.

Note:	The amount of time it takes for your vehicle to respond to a command can be affected by cellular coverage or network congestion.

Note:	Your SmartStart module automatically checks for updates once every 24 hours. During updates, system operation is disrupted for approximately one minute.

Directed® ELECTRONICS

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WARNING
VEHICLE EQUIPPED WITH A DEI® REMOTE START SYSTEM
If vehicle battery is disconnected, the system may attempt to start when the battery is reconnected or transmitter is used. Press brake to disengage. Check with vehicle owner to determine if hood pin switch or override switch was installed to disengage the system for service.
IMPORTANT SAFETY NOTICE

Thank you for selecting an innovative product from Directed Electronics, Inc. (DEI®). Since its inception, DEI has brought the proven advantages of custom micro-controllers and innovative technologies to the automotive industry. DEI is committed to delivering the best products we know how to provide and constantly working to improve our products, quality, delivery and customer friendly features.

As a recipient of numerous patents, DEI has established new standards in electronic design, automated manufacturing and dealer support. DEI's electronic products are sold and serviced worldwide.

This product is covered by one or more of the following U.S. patents:

303,223	333,633	333,634	333,635	333,636	333,795
340,000	344,905	345,317	345,711	347,190	348,622
352,685	383,689	383,690	390,830	392,944	4,327,444
4,383,242	4,438,426	4,553,127	4,584,569	4,794,368	4,887,064
4,897,630	4,922,224	4,987,402	5,103,221	5,117,217	5,132,660
5,193,141	5,245,694	5,285,186	5,315,285	5,357,560	5,532,670
5,534,845	5,572,185	5,646,591	5,656,997	5,712,638	5,783,989
5,798,711	5,872,519	5,900,806	5,907,195	5,914,667	5,945,936
5,952,933	5,990,786	6,093,979			

International Patents:

Australia: 694,925

Canada: 1,315,859 and 2,067,099

Taiwan: 91817

Other patents pending

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Directed® ELECTRONICS, INC.
Security

PRODUCT REGISTRATION

Protect Your Investment

***Register* your product for:**

☑ Recall Notifications
We contact our customers in case of recall.

☑ Owner Verification
Registration can serve as verification of your ownership in the event of product theft or loss.

☑ Efficient Service
Completing this card will help you obtain more efficient warranty service in case there is a problem with your product.

Don't forget
We know you are busy, but registering is important, quick and easy!

Or register online at www.prodregister.com/directed

Directed ELECTRONICS, INC.

IMPORTANT! IMPORTANT!
Please complete and return within the next 10 days or register online at www.prodregister.com/directed

XFJ01

1. 1. ☐ Mr. 2. ☐ Mrs. 3. ☐ Ms. 4. ☐ Miss

First name Initial Last name

Street Apt.

City State/Province Zip/Postal code

E-mail address

2. Your date of birth: / / (Month / Year)

3. Marital status: 1. ☐ Married 2. ☐ Single

4. Date of purchase: / / (Month / Day / Year)

5. Model number:

6. Name of store where purchased:

7. Price paid *(excluding sales tax)*: $ .00

8. Which Directed Electronics brand did you purchase?
1. ☐ Autostart
2. ☐ Avital
3. ☐ Clifford
4. ☐ Python
5. ☐ Viper

9. What type of product did you purchase?
1. ☐ Security system
2. ☐ Security system with remote start
3. ☐ Remote start system
4. ☐ Keyless entry system

10. In what vehicle will this product be used?

Vehicle type:
1. ☐ Car
2. ☐ Truck
3. ☐ SUV
4. ☐ Van
5. ☐ Minivan
6. ☐ Motorcycle
7. ☐ Boat
8. ☐ Motor home
9. ☐ Other

Make of vehicle:

Model name:

VIN #:

Year:
A. ☐ Bought new
B. ☐ Bought used
C. ☐ Leased
D. ☐ Leased used

11. How did you first become aware of this product? *(check one)*
01. ☐ Local newspaper
02. ☐ Yellow pages
03. ☐ Magazine advertisement
04. ☐ TV commercial
05. ☐ Magazine article/ review
06. ☐ Friend/Relative's recommendation
07. ☐ Radio commercial
08. ☐ Salesperson's recommendation
09. ☐ Manufacturer's website
10. ☐ Retailer's website
11. ☐ Internet forum
12. ☐ Other

12. What factors most influenced the purchase? *(check up to three)*
01. ☐ Directed Electronics reputation
02. ☐ Brand reputation
03. ☐ Experience with Directed product
04. ☐ Experience with dealer
05. ☐ Value/Price
06. ☐ Warranty
07. ☐ Special features
08. ☐ Quality/Durability
09. ☐ Sound board/In-vehicle demo
10. ☐ Rebate/Promotion
11. ☐ Style/Design/Color
12. ☐ Dealer proximity
13. ☐ Friend/Relative's recommendation
14. ☐ Salesperson's recommendation
15. ☐ Ease of installation
16. ☐ Compatibility with vehicle
17. ☐ Other

13. What benefits most influenced your decision to purchase this product? *(check up to three)*
01. ☐ Improved security
02. ☐ Improved convenience
03. ☐ Improved performance
04. ☐ Compatibility with vehicle
05. ☐ Ease of installation
06 ☐ Style/Design/Color
07. ☐ Special features
08. ☐ Quality/Durability
09. ☐ Increase vehicle value
10. ☐ Functionality
11. ☐ Warranty
12. ☐ Price/Value
13. ☐ Rebate/Promotion
14. ☐ Immediate availability
15. ☐ Friend/Relative's recommendation
16. ☐ Salesperson's recommendation
17. ☐ Dealer proximity

14. What other brands did you seriously consider before making this purchase?
1. ☐ No other brands considered
2. ☐ Other Directed Electronics brands
3. ☐ Code Alarm
4. ☐ Audiovox
5. ☐ Auto Page
6. ☐ Compustar
7. ☐ Prestige
8. ☐ Pursuit
9. ☐ Crime Stopper
10. ☐ Bulldog

15. ***Not including yourself,*** what is the GENDER and AGE (in years) of children and other adults living in your household?
1. ☐ No one else in household 2. ☐ Child under 1 year

Male	Female	Age		Male	Female	Age	
1. ☐	2. ☐		yrs.	1. ☐	2. ☐		yrs.
1. ☐	2. ☐		yrs.	1. ☐	2. ☐		yrs.

16. Occupation/Employment status: *(check all that apply)*

	You	Spouse
Professional/Technical	☐	01. ☐
Upper management/Executive	☐	02. ☐
Middle management	☐	03. ☐
Sales/Marketing	☐	04. ☐
Clerical/Service worker	☐	05. ☐
Tradesman/Machine operator/Laborer	☐	06. ☐
Teacher/Educator	☐	07. ☐
Healthcare - Physician/Nurse/Other	☐	08. ☐
Homemaker	☐	09. ☐
Military	☐	10. ☐
Retired	☐	11. ☐
Self employed/Business owner	☐	12. ☐
Work from home office	☐	13. ☐

17. Which group describes your annual family income?
01. ☐ Under $15,000
02. ☐ $15,000-$19,999
03. ☐ $20,000-$29,999
04. ☐ $30,000-$39,999
05. ☐ $40,000-$49,999
06. ☐ $50,000-$59,999
07. ☐ $60,000-$74,999
08. ☐ $75,000-$99,999
09. ☐ $100,000-$124,999
10. ☐ $125,000-$149,999
11. ☐ $150,000-$174,999
12. ☐ $175,000-$199,999
13. ☐ $200,000-$249,999
14. ☐ $250,000 & over

18. Level of education: *(check highest level completed)*
1. ☐ Completed high school
2. ☐ Completed college
3. ☐ Completed graduate school

19. For your primary residence, do you:
1. ☐ Own? 2. ☐ Rent?

20. What type of internet access do you use at home?
1. ☐ Dial-up
2. ☐ Cable
3. ☐ DSL
4. ☐ Other broadband (e.g. fiber optic, wireless Wi-Max)
5. ☐ Satellite

21. When new products that have the latest technologies appear on the market, do you or someone in your household:
1. ☐ Tend to buy such items as soon as they are available?
2. ☐ Tend to wait until the item has been around for a while before buying?

22. To help us understand our customers' lifestyles, please indicate the interests and activities in which *you* or *your spouse* enjoy participating on a *regular* basis.

Home Life

- 01. ☐ Grandchildren
- 02. ☐ Home improvement/Do-it-yourself
- 03. ☐ Gardening
- 04. ☐ Own a dog
- 05. ☐ Own a cat

Leisure

- 06. ☐ Cultural/Art events
- 07. ☐ Avid book reading
- 08. ☐ Bible/Devotional reading
- 09. ☐ Gourmet cooking/Fine foods
- 10. ☐ Wines
- 11. ☐ Art/Antique collecting
- 12. ☐ Stamp/Coin collecting
- 13. ☐ Crafts
- 14. ☐ Sewing/Needlework/Knitting

Travel

- 15. ☐ Airline club/Frequent flyer
- 16. ☐ Travel in USA
- 17. ☐ Foreign travel
- 18. ☐ Cruise ship vacations
- 19. ☐ RV vacations
- 20. ☐ Casino gambling

Investing and Money

- 21. ☐ Shopping by catalog/mail order
- 22. ☐ Shopping by internet
- 23. ☐ Use credit cards regularly
- 24. ☐ Donate to charitable causes
- 25. ☐ Investments/Money making opportunities
- 26. ☐ Contests/Sweepstakes

Great Outdoors

- 27. ☐ Hunting/Shooting
- 28. ☐ Fishing
- 29. ☐ Camping/Hiking
- 30. ☐ Wildlife/Environmental issues
- 31. ☐ Boating/Sailing

Sports, Fitness & Health

- 32. ☐ Physical fitness/Exercise
- 33. ☐ Walking for health
- 34. ☐ Health/Natural foods
- 35. ☐ Dieting/Weight control
- 36. ☐ Self-improvement
- 37. ☐ Golf
- 38. ☐ Biking
- 39. ☐ Snowboarding/Snow skiing
- 40. ☐ NASCAR

Thanks for taking the time to fill out this questionnaire. Your answers will be used for market research studies and reports. They will also allow you to receive important mailings and special offers from a number of fine companies whose products and services relate directly to the specific interests, hobbies, and other information indicated above. Through this selective program, you will be able to obtain more information about activities in which you are involved and less about those in which you are not. Please check here if, for some reason, you would prefer *not* to participate in this opportunity. ☐

Failure to return this card will not diminish your warranty rights.

540-0070 (A)

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Vista, CA 92081

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